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(54) Method of manufacturing a semiconductor device of multilayer wire structure

(57) In a method of manufacturing a semiconductor device, when a copper diffusion preventing film portion (165) on the connecting hole bottom portion (145, 155) is to be removed, a film thickness of other portion of the copper diffusion preventing film (165) not to be removed is more thickly formed than that of the to-be-removed copper diffusion preventing film portion on the connecting hole bottom portion, thereby only the copper diffu-

sion preventing film portion to be removed can be removed. The method can extend a durable length of time of a wire and can reduce a resistance of the metal wires in a connecting hole bottom portion by removing a copper diffusion preventing film (165) on the bottom portion of the connecting hole (145, 155).

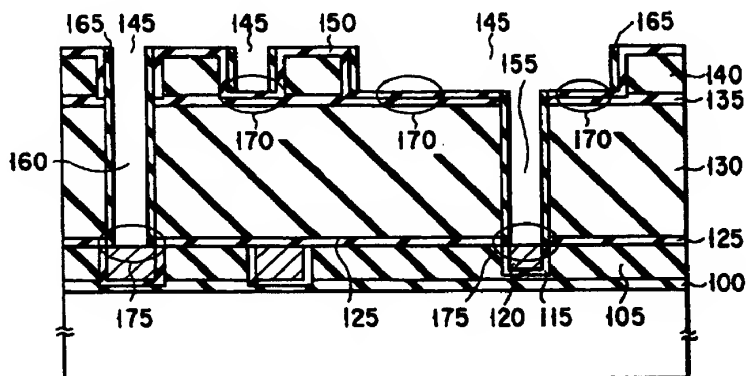


FIG. 5

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 281 850 A (KANAMORI JUN) * column 2, line 50 - column 4, line 26 * * figures 1A-1F * ---	1-30	H01L21/768 H01L23/522
A	EP 0 571 108 A (SGS THOMSON MICROELECTRONICS) * column 1, line 53 - column 3, line 15 * * figures 1-4 * ---	1-30	
A	CA 2 082 771 A (HO VU Q ; JOLLY GURVINDER (CA); EMESH ISMAIL T (CA); NORTHERN TELECOM) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H01L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 April 1998	Examiner Schuermans, N
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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